SUBCHAPTER F—TRANSPORTATION INFRASTRUCTURE MANAGEMENT

PART 500—MANAGEMENT AND MONITORING SYSTEMS

Subpart A—Management systems

Sec.

Subpart B—Traffic Monitoring System

AUTHORITY: 23 U.S.C. 134, 135, 303, and 315; 49 U.S.C. 5303–5305; 23 CFR 1.32; and 49 CFR 1.48 and 1.51.

SOURCE: 61 FR 67170, Dec. 19, 1996, unless otherwise noted.

Subpart A—Management Systems

§ 500.101 Purpose.

The purpose of this part is to implement the requirements of 23 U.S.C. 303(a) which directs the Secretary of Transportation (the Secretary) to issue regulations for State development, establishment, and implementation of systems for managing highway pavement of Federal-aid highways (PMS), bridges on and off Federal-aid highways (BMS), highway safety (SMS), traffic congestion (CMS), public transportation facilities and equipment (PTMS), and intermodal transportation facilities and systems (IMS). This regulation also implements 23 U.S.C. 303(b) which directs the Secretary to issue guidelines and requirements for State development, establishment, and implementation of a traffic monitoring system for highways and public transportation facilities and equipment (TMS).

§ 500.102 Policy.

(a) Federal, State, and local governments are under increasing pressure to balance their budgets and, at the same time, respond to public demands for quality services. Along with the need to invest in America's future, this leaves transportation agencies with the task of trying to manage current transportation systems as cost-effectively as possible to meet evolving, as well as backlog needs. The use of existing or new transportation management systems provides a framework for cost-effective decision making that emphasizes enhanced service at reduced public and private life-cycle cost. The primary outcome of transportation management systems is improved system performance and safety. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) strongly encourage implementation of transportation management systems consistent with State, metropolitan planning organization, transit operator, or local government needs.

(b) Whether the systems are developed under the provisions of this part or under a State's own procedures, the following categories of FHWA administered funds may be used for development, establishment, and implementation of any of the management systems and the traffic monitoring system: National highway system; surface transportation program; State planning and research and metropolitan planning funds (including the optional use of minimum allocation funds authorized under 23 U.S.C. 157(c) and restoration funds authorized under § 202(f) of the National Highway System Designation Act of 1995 (Pub.L. 104–59) for carrying out the provisions of 23 U.S.C. 307(c)(1) and 23 U.S.C. 134(a)); congestion mitigation and air quality improvement program funds for those management systems that can be shown to contribute to the attainment of a national ambient air quality standard; and apportioned bridge funds for development

and establishment of the bridge management system. The following categories of FTA administered funds may be used for development, establishment, and implementation of the CMS, PTMS, IMS, and TMS: Metropolitan planning; State planning and research, and formula transit funds.

§ 500.103 Definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) are applicable to this part. As used in this part:

Federal-aid highways means those highways eligible for assistance under title 23, U.S.C., except those functionally classified as local or rural minor collectors.

Metropolitan planning organization (MPO) means the forum for cooperative transportation decision making for a metropolitan planning area.

National Highway System (NHS) means the system of highways designated and approved in accordance with the provisions of 23 U.S.C. 103(b).

State means any one of the fifty States, the District of Columbia, or Puerto Rico.

Transportation management area (TMA) means an urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the MPO (or affected local officials), and officially designated by the Administrators of the FHWA and the FTA. The TMA designation applies to the entire metropolitan planning area(s).

§ 500.104 State option.

Except as specified in § 500.105 (a) and (b), a State may elect at any time not to implement any one or more of the management systems required under 23 U.S.C. 303, in whole or in part.

§ 500.105 Requirements.

(a) The metropolitan transportation planning process (23 U.S.C. 134 and 49 U.S.C. 5303–5005) in TMAs shall include a CMS that meets the requirements of § 500.109 of this regulation.

(b) States shall develop, establish, and implement a TMS that meets the requirements of subpart B of this regulation.

(c) Any of the management systems that the State chooses to implement under 23 U.S.C. 303 and this regulation shall be developed in cooperation with MPOs in metropolitan areas, affected agencies receiving assistance under the Federal Transit Act (49 U.S.C., Chapter 53), and other agencies (including private owners and operators) that have responsibility for operation of the affected transportation systems or facilities.

(d) The results (e.g., policies, programs, projects, etc.) of any of the management systems that a State chooses to develop under 23 U.S.C. 303 and this regulation shall be considered in the development of metropolitan and statewide transportation plans and improvement programs and in making project selection decisions under title 23, U.S.C., and under the Federal Transit Act. Plans and programs adopted after September 30, 1997, shall demonstrate compliance with this requirement.

§ 500.106 PMS.

An effective PMS for Federal-aid highways is a systematic process that provides information for use in implementing cost-effective pavement reconstruction, rehabilitation, and preventative maintenance programs and that results in pavements designed to accommodate current and forecasted traffic in a safe, durable, and cost-effective manner. The PMS should be based on the ''AASHTO Guidelines for Pavement Management Systems.'' [1]

§ 500.107 BMS.

An effective BMS for bridges on and off Federal-aid highways that should be based on the ''AASHTO Guidelines for Bridge Management Systems'' [2] and

[1] *AASHTO Guidelines for Pavement Management Systems,* July 1990, can be purchased from the American Association of State Highway and Transportation Officials, 444 N. Capitol Street, NW., Suite 249, Washington, D.C. 20001. Available for inspection as prescribed in 49 CFR part 7, appendix D.

[2] *AASHTO Guidelines for Bridge Management Systems,* 1992, can be purchased from the American Association of State Highway and Transportation Officials, 444 N. Capitol Street, NW., Suite 249, Washington, D.C.

Continued

that supplies analyses and summaries of data, uses mathematical models to make forecasts and recommendations, and provides the means by which alternative policies and programs may be efficiently considered. An effective BMS should include, as a minimum, formal procedures for:

(a) Collecting, processing, and updating data;

(b) Predicting deterioration;

(c) Identifying alternative actions;

(d) Predicting costs;

(e) Determining optimal policies;

(f) Performing short- and long-term budget forecasting; and

(g) Recommending programs and schedules for implementation within policy and budget constraints.

§ 500.108 SMS.

An SMS is a systematic process with the goal of reducing the number and severity of traffic crashes by ensuring that all opportunities to improve highway safety are identified, considered, implemented as appropriate, and evaluated in all phases of highway planning, design, construction, maintenance, and operation and by providing information for selecting and implementing effective highway safety strategies and projects. The development of the SMS may be based on the guidance in ''Safety Management Systems: Good Practices for Development and Implementation.''[3] An effective SMS should include, at a minimum:

(a) Communication, coordination, and cooperation among the organizations responsible for the roadway, human, and vehicle safety elements;

(b) A focal point for coordination of the development, establishment, and implementation of the SMS among the agencies responsible for these major safety elements;

(c) Establishment of short- and long-term highway safety goals to address identified safety problems;

(d) Collection, analysis, and linkage of highway safety data;

(e) Identification of the safety responsibilities of units and positions;

(f) Public information and education activities; and

(g) Identification of skills, resources, and training needs to implement highway safety programs.

§ 500.109 CMS.

(a) For purposes of this part, congestion means the level at which transportation system performance is unacceptable due to excessive travel times and delays. Congestion management means the application of strategies to improve system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods in a region. A congestion management system or process is a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system operations and performance and assesses alternative strategies for congestion management that meet State and local needs.

(b) The development of a congestion management system or process should result in performance measures and strategies that can be integrated into transportation plans and programs. The level of system performance deemed acceptable by State and local officials may vary by type of transportation facility, geographic location (metropolitan area or subarea and/or non-metropolitan area), and/or time of day. In both metropolitan and non-metropolitan areas, consideration needs to be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity of those lanes.

[72 FR 7285, Feb. 14, 2007]

20001. Available for inspection as prescribed in 49 CFR part 7, appendix D.

[3] *Safety Management Systems: Good Practices for Development and Implementation,* FHWA and NHTSA, May 1996. Available for inspection and copying as prescribed in 49 CFR part 7, appendix D.

§ 500.110 PTMS.

An effective PTMS for public transportation facilities (e.g., maintenance facilities, stations, terminals, transit related structures), equipment, and rolling stock is a systematic process that collects and analyzes information on the condition and cost of transit assets on a continual basis, identifies needs, and enables decision makers to select cost-effective strategies for providing and maintaining transit assets in serviceable condition. The PTMS should cover public transportation systems operated by the State, local jurisdictions, public transportation agencies and authorities, and private (for profit and non-profit) transit operators receiving funds under the Federal Transit Act and include, at a minimum:

(a) Development of transit asset condition measures and standards;

(b) An inventory of the transit assets including age, condition, remaining useful life, and replacement cost; and

(c) Identification, evaluation, and implementation of appropriate strategies and projects.

§ 500.111 IMS.

An effective IMS for intermodal facilities and systems provides efficient, safe, and convenient movement of people and goods through integration of transportation facilities and systems and improvement in the coordination in planning, and implementation of air, water, and the various land-based transportation facilities and systems. An IMS should include, at a minimum:

(a) Establishment of performance measures;

(b) Identification of key linkages between one or more modes of transportation, where the performance or use of one mode will affect another;

(c) Definition of strategies for improving the effectiveness of these modal interactions; and

(d) Evaluation and implementation of these strategies to enhance the overall performance of the transportation system.

Subpart B—Traffic Monitoring System

§ 500.201 Purpose.

The purpose of this subpart is to set forth requirements for development, establishment, implementation, and continued operation of a traffic monitoring system for highways and public transportation facilities and equipment (TMS) in each State in accordance with the provisions of 23 U.S.C. 303 and subpart A of this part.

§ 500.202 TMS definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) and § 500.103 are applicable to this subpart. As used in this part:

Highway traffic data means data used to develop estimates of the amount of person or vehicular travel, vehicle usage, or vehicle characteristics associated with a system of highways or with a particular location on a highway. These types of data support the estimation of the number of vehicles traversing a section of highway or system of highways during a prescribed time period (traffic volume), the portion of such vehicles that may be of a particular type (vehicle classification), the weights of such vehicles including the weight of each axle and associated distances between axles on a vehicle (vehicle weight), or the average number of persons being transported in a vehicle (vehicle occupancy).

Traffic monitoring system means a systematic process for the collection, analysis, summary, and retention of highway and transit related person and vehicular traffic data.

Transit traffic data means person and vehicular data for public transportation on public highways and streets and the number of vehicles and ridership for dedicated transit rights-of-way (e.g., rail and busways), at the maximum load points for the peak period in the peak direction and for the daily time period.

§ 500.203 TMS general requirements.

(a) Each State shall develop, establish, and implement, on a continuing basis, a TMS to be used for obtaining highway traffic data when:

(1) The data are supplied to the U.S. Department of Transportation (U.S. DOT);

(2) The data are used in support of transportation management systems;

(3) The data are used in support of studies or systems which are the responsibility of the U.S. DOT;

(4) The collection of the data is supported by the use of Federal funds provided from programs of the U.S. DOT;

(5) The data are used in the apportionment or allocation of Federal funds by the U.S. DOT;

(6) The data are used in the design or construction of an FHWA funded project; or

(7) The data are required as part of a federally mandated program of the U.S. DOT.

(b) The TMS for highway traffic data should be based on the concepts described in the American Association of State Highway and Transportation Officials (AASHTO) ''AASHTO Guidelines for Traffic Data Programs''[4] and the FHWA ''Traffic Monitoring Guide (TMG),''[5] and shall be consistent with the FHWA ''Highway Performance Monitoring System Field Manual.''[6]

(c) The TMS shall cover all public roads except those functionally classified as local or rural minor collector or those that are federally owned. Coverage of federally owned public roads shall be determined cooperatively by the State, the FHWA, and the agencies that own the roads.

(d) The State's TMS shall apply to the activities of local governments and other public or private non-State government entities collecting highway traffic data within the State if the collected data are to be used for any of the purposes enumerated in § 500.203(a) of this subpart.

(e) Procedures other than those referenced in this subpart may be used if the alternative procedures are documented by the State to furnish the precision levels as defined for the various purposes enumerated in § 500.203(a) of this subpart and are found acceptable by the FHWA.

(f) Nothing in this subpart shall prohibit the collection of additional highway traffic data if such data are needed in the administration or management of a highway activity or are needed in the design of a highway project.

(g) Transit traffic data shall be collected in cooperation with MPOs and transit operators.

(h) The TMS for highways and public transportation facilities and equipment shall be fully operational and in use by October 1, 1997.

§ 500.204 TMS components for highway traffic data.

(a) *General.* Each State's TMS, including those using alternative procedures, shall address the components in paragraphs (b) through (h) of this section.

(b) *Precision of reported data.* Traffic data supplied for the purposes identified in § 500.203(a) of this subpart shall be to the statistical precision applicable at the time of the data's collection as specified by the data users at various levels of government. A State's TMS shall meet the statistical precisions established by FHWA for the HPMS.

(c) *Continuous counter operations.* Within each State, there shall be sufficient continuous counters of traffic volumes, vehicle classification, and vehicle weight to provide estimates of changes in highway travel patterns and to provide for the development of day-of-week, seasonal, axle correction, growth factors, or other comparable factors approved by the FHWA that support the development of traffic estimates to meet the statistical precision requirements of the data uses identified in § 500.203(a) of this subpart. As appropriate, sufficient continuous

[4] AASHTO Guidelines for Traffic Data Programs, 1992, ISBN 1–56051–054–4, can be purchased from the American Association of State Highway and Transportation Officials, 444 N. Capitol Street, NW., Suite 249, Washington, D.C. 20001. Available for inspection as prescribed in 49 CFR part 7, appendix D.

[5] Traffic Monitoring Guide, DOT/FHWA, publication No. FHWA-PL-95-031, February 1995. Available for inspection and copying as prescribed in 49 CFR part 7, appendix D.

[6] Highway Performance Monitoring System (HPMS) Field Manual for the Continuing Analytical and Statistical Data Base, DOT/FHWA, August 30, 1993 (FHWA Order M5600.1B). Available for inspection and copying as prescribed in 49 CFR part 7, appendix D.

counts of vehicle classification and vehicle weight should be available to address traffic data program needs.

(d) *Short term traffic monitoring.* (1) Count data for traffic volumes collected in the field shall be adjusted to reflect annual average conditions. The estimation of annual average daily traffic will be through the appropriate application of only the following: Seasonal factors, day-of-week factors, and, when necessary, axle correction and growth factors or other comparable factors approved by the FHWA. Count data that have not been adjusted to represent annual average conditions will be noted as being unadjusted when they are reported. The duration and frequency of such monitoring shall comply to the data needs identified in § 500.203(a) of this subpart.

(2) Vehicle classification activities on the National Highway System (NHS), shall be sufficient to assure that, on a cycle of no greater than three years, every major system segment (*i.e.*, segments between interchanges or intersections of principal arterials of the NHS with other principal arterials of the NHS) will be monitored to provide information on the numbers of single-trailer combination trucks, multiple-trailer combination trucks, two-axle four-tire vehicles, buses and the total number of vehicles operating on an average day. If it is determined that two or more continuous major system segments have both similar traffic volumes and distributions of the vehicle types identified above, a single monitoring session will be sufficient to monitor these segments.

(e) *Vehicle occupancy monitoring.* As deemed appropriate to support the data uses identified in § 500.203(a) of this subpart, data will be collected on the average number of persons per automobile, light two-axle truck, and bus. The duration, geographic extent, and level of detail shall be consistent with the intended use of the data, as cooperatively agreed to by the organizations that will use the data and the organizations that will collect the data. Such vehicle occupancy data shall be reviewed at least every three years and updated as necessary. Acceptable data collection methods include roadside monitoring, traveler surveys, the use of administrative records (e.g., accident reports or reports developed in support of public transportation programs), or any other method mutually acceptable to the responsible organizations and the FHWA.

(f) *Field operations.* (1) Each State's TMS for highway traffic data shall include the testing of equipment used in the collection of the data. This testing shall be based on documented procedures developed by the State. This documentation will describe the test procedure as well as the frequency of testing. Standards of the American Society for Testing and Materials or guidance from the AASHTO may be used. Only equipment passing the test procedures will be used for the collection of data for the purposes identified in § 500.203(a) of this subpart.

(2) Documentation of field operations shall include the number of counts, the period of monitoring, the cycle of monitoring, and the spatial and temporal distribution of count sites. Copies of the State's documentation shall be provided to the FHWA Division Administrator when it is initially developed and after each revision.

(g) *Source data retention.* For estimates of traffic or travel, the value or values collected during a monitoring session, as well as information on the date(s) and hour(s) of monitoring, will remain available until the traffic or travel estimates based on the count session are updated. Data shall be available in formats that conform to those in the version of the TMG current at the time of data collection or as then amended by the FHWA.

(h) *Office factoring procedures.* (1) Factors to adjust data from short term monitoring sessions to estimates of average daily conditions shall be used to adjust for month, day of week, axle correction, and growth or other comparable factors approved by the FHWA. These factors will be reviewed annually and updated at least every three years.

(2) The procedures used by a State to edit and adjust highway traffic data collected from short term counts at field locations to estimates of average traffic volume shall be documented. The documentation shall include the factors discussed in paragraph (d)(1) of this section. The documentation shall remain available as long as the traffic

or travel estimates discussed in paragraph (g) of this section remain current. Copies of the State's documentation shall be provided to the FHWA Division Administrator when it is initially developed and after each revision.

PART 505—PROJECTS OF NATIONAL AND REGIONAL SIGNIFICANCE EVALUATION AND RATING

AUTHORITY: Section 1301 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Pub. L. 109–59; 119 Stat. 1144); 23 U.S.C. 315; 49 CFR 1.48.

SOURCE: 73 FR 63370, Oct. 24, 2008, unless otherwise noted.

§ 505.1 Purpose.

The purpose of this part is to establish evaluation, rating, and selection guidelines for funding proposed Projects of National and Regional Significance (PNRS).

§ 505.3 Policy.

A Project of National and Regional Significance should quantitatively improve the throughput or provide long term congestion relief for passenger or freight movement for a part of the transportation network and clearly connect this improvement to sustainable economic productivity for the nation or the region in which it is located.

§ 505.5 Definitions.

Unless otherwise specified in this part, the definitions contained in 23 U.S.C. 101(a) are applicable to this part. In addition, the following definitions apply:

Applicant means either:

(1) A State Transportation Department, or

(2) A group of State Transportation Departments, with one State acting as the project lead.

Eligible project means any surface transportation project or set of integrated surface transportation projects closely related in the function they perform eligible for Federal assistance under title 23, United States Code, including public or private rail facilities providing benefits to highway users, surface transportation infrastructure modifications to facilitate intermodal interchange, transfer, and access into and out of ports and other activities eligible under such title.

Eligible project costs means the costs pertaining to an eligible project for:

(1) Development phase activities, including planning, feasibility analysis, revenue forecasting, environmental review, preliminary engineering and design work, and other preconstruction activities;

(2) Construction, reconstruction, rehabilitation, and acquisition of real property (including land related to the project and improvements to land), environmental mitigation, construction contingencies, acquisition of equipment, and operational improvements; and

(3) all debt financing costs authorized by 23 U.S.C. 122.

Full Funding Grant Agreement (FFGA) means the agreement used to provide Federal financial assistance under title 23, United States Code, for Projects of National and Regional Significance. An FFGA defines the scope of the project, establishes the maximum amount of Government financial assistance for the project, covers the period of time for completion of the project, facilitates the efficient management of the project in accordance with applicable Federal statutes, regulations, and policy, including oversight roles and responsibilities, and other terms and conditions.

§ 505.7 Eligibility.

To be eligible for assistance under this program:

(a) A project meeting the definition of an eligible project under 505.5 of this section located fully within one State shall have eligible project costs that

are quantified in the project proposal as equal to or exceeding the lesser of:

(1) $500,000,000; or

(2) 75 percent of the amount of Federal highway assistance funds apportioned for the most recently completed fiscal year to the State in which the project is located.

(b) A multi-State project meeting the definition of an eligible project under 505.5 of this section shall have eligible project costs that are quantified in the project proposal as equal to or exceeding the lesser of:

(1) $500,000,000; or

(2) 75 percent of the amount of Federal highway assistance funds apportioned for the most recently completed fiscal year to the State in which the project is located that has the largest apportionment.

§ 505.9 Criteria for grants.

(a) The Secretary will approve a grant for a Project of National and Regional Significance project only if the Secretary determines, based upon information submitted by the applicant, that the project:

(1) Is based on the results of preliminary engineering;

(2) Is supported by an acceptable degree of non-Federal financial commitments, including evidence of stable and dependable financing sources to construct, maintain, and operate the infrastructure facility. In evaluating a non-Federal financial commitment, the Secretary shall require that:

(i) The proposed project plan provides for the availability of contingency amounts that the Secretary determines to be reasonable to cover unanticipated cost increases; and

(ii) Each proposed non-Federal source of capital and operating financing is stable, reliable, and available within the proposed project timetable. In assessing the stability, reliability, and availability of proposed sources of non-Federal financing, the Secretary will consider:

(A) Existing financial commitments;

(B) The degree to which financing sources are dedicated to the purposes proposed;

(C) Any debt obligation that exists or is proposed by the recipient for the proposed project; and

(D) The extent to which the project has a non-Federal financial commitment that exceeds the required non-Federal share of the cost of the project.

(3) Emerges from the metropolitan and Statewide planning process, consistent with 23 CFR Part 450;

(4) Is justified based on the ability of the project:

(i) To generate national and/or regional economic benefits, as evidenced by, but not limited to:

(A) The creation of jobs, expansion of business opportunities, and impacts to the gross domestic product due to quantitatively increased throughput;

(B) The amount and importance of freight and passenger travel served; and

(C) The demographic and economic characteristics of the area served.

(ii) To allocate public and private costs commensurate with the share of public and private benefits and risks;

(iii) To generate long-term congestion relief that impacts the State, the region, and the Nation, as evidenced by, but not limited to:

(A) Congestion levels, delay and consequences of delay;

(B) Efficiency and effectiveness of congestion mitigation; and

(C) Travel time reliability.

(iv) To improve transportation safety, including reducing transportation accidents, injuries, and fatalities, as evidenced by, but not limited to, number, rate and consequences of crashes, injuries and fatalities in the affected region and corridor;

(v) To otherwise enhance the national transportation system by improving throughput; and

(vi) To garner support for non-Federal financial commitments and provide evidence of stable and dependable financing sources to construct, maintain, and operate the infrastructure facility.

(b) In selecting projects under this section, the Secretary will consider the extent to which the project:

(1) Leverages Federal investment by encouraging non-Federal contributions to the project, including contributions from public-private partnerships;

(2) Uses new technologies, including intelligent transportation systems,

that enhance the efficiency of the project;

(3) Helps maintain or protect the environment; and

(4) Demonstrates that the proposed project cannot be readily and efficiently realized without Federal support and participation.

(c) All information submitted as part of or in support of an application shall use publicly available data or data that can be made public and methodologies that are accepted by industry practice and standards.

(d) Measures for the selection criteria shall include projections for both the build and no-build scenarios.

(e) PNRS solicitations or guidance documents will contain, as needed, additional specific information regarding measures, weighting, and use of these criteria.

(f) All proposed PNRS projects are required to comply with the requirements of 23 U.S.C. 106(h) regardless of whether the project meets project cost threshold for classification as a major project.

§ 505.11 Project evaluation and rating.

(a) The Secretary shall evaluate and rate each proposed project as ''highly recommended,'' ''recommended,'' or ''not recommended'' based on the criteria in section 505.9 of this part. Individual ratings of ''highly recommended,'' ''recommended,'' or ''not recommended'' will be conducted for each of the selection criteria.

(b) In response to a PNRS project solicitation a State may submit a project for a non-binding preliminary rating and evaluation at any point in the project development after the project's concept plan is developed.

(c) Non-binding preliminary rating and evaluation will be reported in the appendix of the Secretary's Annual Report on PNRS.

(d) A rating and evaluation will be considered complete and listed in the Secretary's Annual Report on PNRS only after preliminary engineering is completed.

(e) The rating and evaluation for a proposed project will remain valid until the closing date of the next PNRS solicitation.

§ 505.13 Federal Government's share of project cost.

(a) Based on engineering studies, studies of economic feasibility, and information on the expected use of equipment or facilities, the Secretary shall estimate the project's eligible costs.

(b) A FFGA for the project shall not exceed 80 percent of the eligible project cost. A refund or reduction of the remainder may only be made if a refund of a proportional amount of the grant of the Federal Government is made at the same time.

§ 505.15 Full funding grant agreement.

(a) A proposed project may not be funded under this program unless the Secretary finds that the project meets the requirements of this part and there is a reasonable likelihood that the project will continue to meet such requirements.

(b) A project financed under this section shall be carried out through a FFGA. The Secretary shall enter into a FFGA based on the evaluations and ratings required herein, and in accordance with the terms specified in section 1301(g)(2) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, (Pub. L. 109–59; 119 Stat. 1144).

(c) A FFGA will be entered into only after the project has commitments for non-Federal funding in place and all other requirements are met.

(d) A State may request the use of Advanced Construction for the project and subsequently convert those funds to an eligible Federal-aid funding category or to PNRS funding as part of the FFGA.

§ 505.17 Applicability of Title 23, U.S. Code.

Funds made available to carry out this section shall be available for obligation in the same manner as if such funds were apportioned under chapter 1 of title 23, United States Code; except that such funds shall not be transferable to other agencies and shall remain available until expended and the Federal share of the cost of a Project of National and Regional Significance shall be as provided in section 505.13.

PART 511—REAL-TIME SYSTEM MANAGEMENT INFORMATION PROGRAM

Subparts A–B [Reserved]

Subpart C—Real-Time System Management Information Program

AUTHORITY: Section 1201, Pub. L. 109–59; 23 U.S.C. 315; 23 U.S.C. 120; 49 CFR 1.48.

SOURCE: 75 FR 68427, Nov. 8, 2010, unless otherwise noted.

Subparts A–B [Reserved]

Subpart C—Real-Time System Management Information Program

§511.301 Purpose.

The purpose of this part is to establish the provisions and parameters for the Real-Time System Management Information Program. These provisions implement Subsections 1201(a)(1), (a)(2), and (c)(1) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU) (Pub. L. 109–59; 119 Stat. 1144), pertaining to Congestion Relief.

§511.303 Definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) are applicable to this subpart. As used in this part:

Accuracy means the measure or degree of agreement between a data value or set of values and a source assumed to be correct.

Availability means the degree to which data values are present in the attributes (e.g., speed and travel time are attributes of traffic) that require them. Availability is typically described in terms of percentages or number of data values.

Congestion means the level at which transportation system performance is unacceptable due to excessive travel times and delays.

Data quality means the fitness of data for all purposes that require such data.

Full construction activities mean roadway construction or maintenance activities that affect travel conditions by closing and reopening roadways or lanes.

Metropolitan areas means the geographic areas designated as Metropolitan Statistical Areas by the Office of Management and Budget in the Executive Office of the President with a population exceeding 1,000,000 inhabitants.

Real-time information program means the program by which States gather and make available the data for traffic and travel conditions. Such means may involve State-only activity (including cooperative activities engaging multiple State agencies), State partnership with commercial providers of value-added information products, or other effective means that enable the State to satisfy the provisions for traffic and travel time conditions reporting stated in this section.

Routes of significance are non-Interstate roadways in metropolitan areas that are designated by States as meriting the collection and provision of information related to traffic and travel conditions. Factors to be considered in designating routes of significance include roadway safety (e.g., crash rate, routes affected by environmental events), public safety (e.g., routes used for evacuations), economic productivity, severity and frequency of congestion, and utility of the highway to serve as a diversion route for congestion locations. All public roadways including arterial highways, toll facilities and other facilities that apply end user pricing mechanisms shall be considered when designating routes of significance. In identifying these routes, States shall apply the collaborative practices and procedures that are used for compliance with 23 CFR part 940 and 23 CFR part 420.

Statewide incident reporting system means a statewide system for facilitating the real-time electronic reporting of surface transportation incidents to a central location for use in monitoring the event, providing accurate traveler information, and responding to the incident as appropriate. This definition is consistent with Public Law 109–59; 119 Stat. 1144, Section 1201(f).

Timeliness means the degree to which data values or a set of values are provided at the time required or specified.

Traffic and travel conditions means the characteristics that the traveling public experiences. Traffic and travel conditions include, but are not limited to, the following characteristics:

(1) Road or lane closures because of construction, traffic incidents, or other events;

(2) Roadway weather or other environmental conditions restricting or adversely affecting travel; and

(3) Travel times or speeds on limited access roadways in metropolitan areas that experience recurring congestion.

Validity means the degree to which data values fall within the respective domain of acceptable values.

Value-added information products means crafted products intended for commercial use, for sale to a customer base, or for other commercial enterprise purposes. These products may be derived from information gathered by States and may be created from other party or proprietary sources. These products may be created using the unique means of the value-added information provider.

§ 511.305 Policy.

This part establishes the provisions and parameters for the Real-Time System Management Information Program for State DOTs, other responsible agencies, and partnerships with other commercial entities in establishing real-time information programs that provide accessibility to traffic and travel conditions information by other public agencies, the traveling public, and by other parties who may deliver value-added information products.

§ 511.307 Eligibility for Federal funding.

(a) Subject to project approval by the Secretary, a State may obligate funds apportioned to the State under Title 23 U.S.C. sections 104(b)(1), also known as National Highway System funds, 104(b)(2), also known as CMAQ Improvement funds, and 104(b)(3), also known as STP funds, for activities relating to the planning, deployment and operation, including preventative maintenance, of real-time monitoring elements that advance the goals and purposes of the Real-Time System Management Information Program. The SPC funds, apportioned according to 23 U.S.C. 505(a), may be applied to the development and implementation of a real-time information program.

(b) Those project applications to establish a real-time information program solely for Interstate System highways are entitled to a Federal share of 90 percent of the total project cost, pursuant to 23 U.S.C. 120(a). Those project applications to establish a real-time information program for non-Interstate highways are entitled to a Federal share of 80 percent of the total project cost, as per 23 U.S.C. 120(b).

§ 511.309 Provisions for traffic and travel conditions reporting.

(a) Minimum requirements for traffic and travel conditions made available by real-time information programs are:

(1) *Construction activities.* The timeliness for the availability of information about full construction activities that close or reopen roadways or lanes will be 20 minutes or less from the time of the closure for highways outside of Metropolitan Areas. For roadways within Metropolitan Areas, the timeliness for the availability of information about full construction activities that close or reopen roadways or lanes will be 10 minutes or less from the time of the closure or reopening. Short-term or intermittent lane closures of limited duration that are less than the required reporting times are not included as a minimum requirement under this section.

(2) *Roadway or lane blocking incidents.* The timeliness for the availability of information related to roadway or lane blocking traffic incidents will be 20

minutes or less from the time that the incident is verified for highways outside of Metropolitan Areas. For roadways within Metropolitan Areas, the timeliness for the availability of information related to roadway or lane blocking traffic incidents will be 10 minutes or less from the time that the incident is verified.

(3) *Roadway weather observations*. The timeliness for the availability of information about hazardous driving conditions and roadway or lane closures or blockages because of adverse weather conditions will be 20 minutes or less from the time the hazardous conditions, blockage, or closure is observed.

(4) *Travel time information*. The timeliness for the availability of travel time information along limited access roadway segments within Metropolitan Areas, as defined under this subpart, will be 10 minutes or less from the time that the travel time calculation is completed.

(5) *Information accuracy*. The designed accuracy for a real-time information program shall be 85 percent accurate at a minimum, or have a maximum error rate of 15 percent.

(6) *Information availability*. The designed availability for a real-time information program shall be 90 percent available at a minimum.

(b) Real-time information programs may be established using legacy monitoring mechanisms applied to the highways, using a statewide incident reporting system, using new monitoring mechanisms applied to the highways, using value-added information products, or using a combination of monitoring mechanisms and value-added information products.

§511.311 Real-time information program establishment.

(a) *Requirement*. States shall establish real-time information programs that are consistent with the parameters defined under §511.309. The real-time information program shall be established to take advantage of the existing traffic and travel condition monitoring capabilities, and build upon them where applicable. The real-time information program shall include traffic and travel condition information for, as a minimum, all the Interstate highways operated by the State. In addition, the real-time information program shall complement current transportation performance reporting systems by making it easier to gather or enhance required information.

(b) *Data quality*. States shall develop the methods by which data quality can be ensured to the data consumers. The criteria for defining the validity of traffic and travel conditions made available from real-time information programs shall be established by the States in collaboration with their partners for establishing the programs. States shall receive FHWA's concurrence that the selected methods provide reasonable checks of the quality of the information made available by the real-time information program. In requesting FHWA's concurrence, the State shall demonstrate to FHWA how the selected methods gauge the accuracy and availability of the real-time information and the remedial actions if the information quality falls below the levels described in §511.309(a)(5) and §511.309(a)(6).

(c) *Participation*. The establishment, or the enhancement, of a real-time information program should include participation from the following agencies: Highway agencies; public safety agencies (e.g., police, fire, emergency/medical); transit operators; and other operating agencies necessary to sustain mobility through the region and/or the metropolitan area. Nothing in this subpart is intended to alter the existing relationships among State, regional, and local agencies.

(d) *Update of Regional ITS Architecture*. All States and regions that have created a Regional ITS Architecture in accordance with Section 940 in Title 23 CFR shall evaluate their Regional ITS Architectures to determine whether the Regional ITS Architectures explicitly address real-time highway and transit information needs and the methods needed to meet such needs. Traffic and travel conditions monitoring needs for all Interstate system highways shall be considered. If necessary, the Regional ITS Architectures shall be updated to address coverage, monitoring systems, data fusion and archiving, and accessibility to highway and transit information for other

States and for value added information product providers. The Regional ITS Architecture shall feature the components and functionality of the real-time information program.

(e) *Effective date.* Establishment of the real-time information program for traffic and travel conditions on the Interstate system highways shall be completed no later than November 8, 2014.

§ 511.313 Metropolitan Area real-time information program supplement.

(a) *Applicability.* Metropolitan Areas as defined under this subpart.

(b) *Requirement.* Metropolitan Areas shall establish a real-time information program for traffic and travel conditions reporting with the same provisions described in § 511.311.

(c) *Routes of significance.* States shall designate metropolitan areas, non-Interstate highways that are routes of significance as defined under this subpart. In identifying the metropolitan routes of significance, States shall collaborate with local or regional agencies using existing coordination methods. Nothing in this subpart is intended to alter the existing relationships among State, regional, and local agencies.

(d) *Effective date.* Establishment of the real-time information program for traffic and travel conditions reporting along the Metropolitan Area Interstate system highways shall be completed no later than November 8, 2014. Establishment of the real-time information program for traffic and travel conditions reporting along the State-designated metropolitan area routes of significance shall be completed no later than November 8, 2016.

§ 511.315 Program administration.

Compliance with this subpart will be monitored under Federal-aid oversight procedures as provided under 23 U.S.C. 106 and 133, 23 CFR 1.36, and 23 CFR 940.13.